# **WINEGARD®**

# TURRET REPLACEMENT KIT RP-RM46 INSTALLATION INSTRUCTIONS for CRANK-UP SATELLITE ANTENNAS

(Except Combination Mounts - RM-4610, etc.)

# Directions for Turret Replacement

- 1. Crank antenna to vertical position.
- 2. Remove crank assembly inside vehicle using #2 Phillips screw driver.
- 3. Is there a nut in the center hole of the directional handle? Remove this nut, using a 9/16" socket wrench.
- 4. Remove directional handle by pulling down. Depending on the original installation, it may be difficult to remove.
- To remove backup assembly from turret, remove the two (2) clamps and four (4) screws. Use 5/16" socket, nut driver or wrench. Do not pull on the wires attached to mount.
- 6. Remove three (3) screws fastening turret to mount. Use 5/16" socket, nut driver or wrench.
- 7. Lift mount straight up until free of all parts. If the worm shaft stays in the turret, remove by pulling on aluminum hex shaft (it should come out easily).
- 8. Remove and clean outer bearing. Use damp cloth to remove grime, then replace bearing.
- Remove and clean gear and hub area. Add a small amount of silicone grease to area where gear and hub rub.
- Replace new turret assembly on mount.
   Rotate assembly until the three mounting holes line up. Carefully fasten with three screws in the existing threads.

Be sure turnet turns freely on mount. Be sure the handle lock is in the rotate position before checking turret movement.

- 11. Rotate square shaft with shaft pin, until pin faces up at approximately 45°.
- Replace worm shaft into top of turret.
   Be sure the spring and spacer are on the shaft.
- 13. Line up hex shaft with hex hole in gear. Slide into hole.

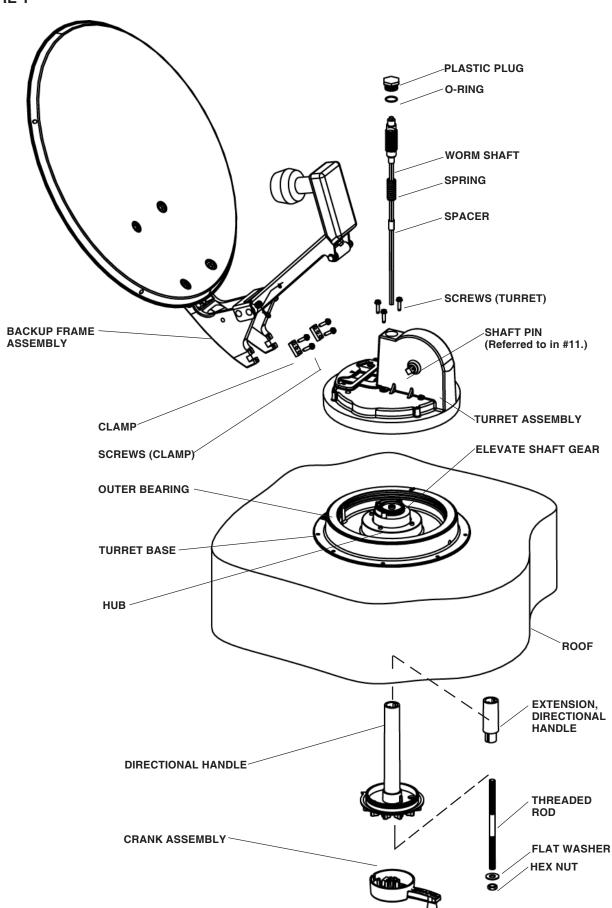
You may need to slightly turn the square shaft to align teeth on worm gear to teeth on worm shaft. The square shaft will rotate as worm shaft is slid down into place.

- Make sure O-ring in on plastic plug.
   Carefully screw plug into turret top. Do not cross thread. Tighten snugly. Do not overtighten O-ring will squeeze out from under nut.
- 15. Replace backup structure. Be sure to route wires the same as they were before disassembling backup structure.
- Replace the interior parts that were removed.

To replace the directional handle, refer to instructions on page 4 for cutting the length.

NOTE: For thick roofs, you may need a longer threaded rod, part number 2162031. Order from Winegard Customer Service at 1-800-288-8094.

### FIGURE 1



# Instructions for Cutting Directional Handle Length

- 1. Place nut on threaded rod.
- 2. Measure and cut threaded rod with hack saw. Use the chart, Figure 2, to determine the length.
- 3. Remove the nut over cut end of threaded rod. This cleans the threads after cutting.
- Thread cut end of rod into hub.
- Install the ceiling plate. The rotate/lock lever must point toward rear of vehicle.

Be sure rotate/lock lever is pointing toward back of vehicle and hole in ceiling aligns with hole in ceiling plate.

**NOTE:** Make sure large and small keyways line up in the hub and directional handle!

6. Measure and cut the directional handle. Figure 3 and chart, Figure 2. NOTE: A tube cutter is recommended for cutting the directional handle. This gives a square cut; a hacksaw does not. If using an extension, allow for extra thickness (see #7).

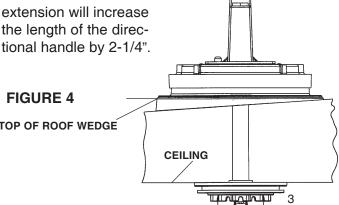
Figure 4 shows what points to measure between, with and without a roof wedge.

7. The directional handle and threaded rod will fit roofs up to 5-1/4" thick. If you are using wedges to compensate for roof/ceiling slope, be sure to allow for this extra thickness. You may add an extension to the **ROOF WEDGE** to ceiling. directional handle for thicker roofs. Each extension will increase the length of the direc-

FIGURE 4

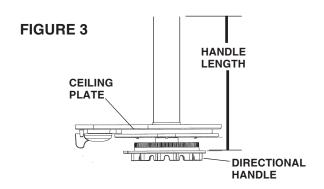
TOP OF ROOF WEDGE

WITH ROOF WEDGE Measure from top of



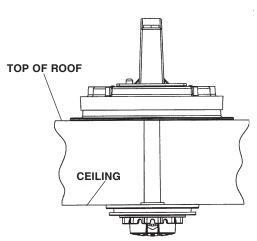
#### FIGURE 2

Roof Thickness	Directional Handle Length (Figure 3)	Threaded Rod Length	Worm Gear Shaft Length (Figure 4)
1-1/2"	2-7/8"	2-3/4"	2-7/8"
1-3/4"	3-1/4"	3"	3-1/8"
2"	3-1/"	3-1/4"	3-1/2"
2-1/4"	3-7/8"	3-1/2"	3-7/8"
2-1/2"	4-1/8"	3-3/4"	4-1/8"
2-3/4"	4-1/2"	4"	4-1/2"
3"	4-3/44"	4-1/4"	4-3/4"
3-1/4"	5"	4-5/8"	4-7/8"
4"	5-3/4"	5-1/2"	5-3/4"
4-1/4"	6-1/8"	6"	6-3/8"
4-3/4"	6-5/8"	6-1/8"	6-3/8"
5"	6-7/8"	6-3/8"	6-5/8"
5-1/4"	7-1/8"	6-5/8"	7"
5-1/2"	7-3/8"	6-7/8"	7-1/4"



#### **WITHOUT ROOF WEDGE**

Measure from top of ROOF to ceiling.



Refer to drawing to identify parts.

**STEP 1.** Release spring at base of feed arm. (This allows you to remove elevating shaft and spring without the dish popping up.) Next, lower antenna to travel position.

**STEP 2.** Loosen set screw on elevating crank handle. Remove crank, #1, directional handle, #2 and extention, #3 (if used).

**STEP 3.** On roof of vehicle, unscrew plug, **#4**, from top of gear housing. Use 1/4" hex head nut driver and turn elevating shaft counterclockwise to remove. Carefully pull out elevating shaft and spring assembly.

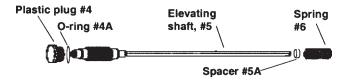
**STEP 4.** To replace elevating shaft, slide spacer #5A, spring, #6, onto elevating shaft, #5. Keep shaft in vertical position and slide into gear housing. You must match the hex shape of the elevating shaft with the hex-shaped hole in the gear inside the gear housing. Do not force. There will be some resistance as you slide the elevating shaft into the housing. Carefully push in until the top of the shaft is down in the top of the housing. Using 1" combination wrench, replace plug, #4, into top of housing.

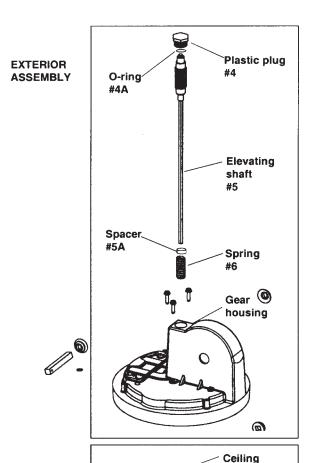
**STEP 5.** Raise dish and reattach spring at base of feed arm.

**STEP 6.** If necessary, adjust elevating shaft length before replacing directional handle, extensions (if used) and elevating crank handle. See owner's manual for instructions.

**STEP 7.** Replace directional handle, extensions (if used) and crank handle.

#### Elevating shaft assembly





Directional handle extension #3

Directional handle #2

Crank handle